

Serial Number 10/015,365
Attorney Docket No. IMPLEX-18/ZM0718

REMARKS

This reply is responsive to the office action mailed December 1, 2005. Upon entry of this reply, claims 1, 3, 5-7, 9-13, 15-17, 19-21, 23, 25-27, 29-33, 35-37 and 39-46 are pending.

Claims 1, 11, 21, 31 and 41-46 have been amended. No new matter has been added, and the application is believed to be in condition for allowance.

In the December 1, 2005 office action, the examiner:

- rejected claims 1, 3, 10, 11, 13, 20, 21, 23, 30, 31, 33, 40, 45 and 46 under 35 U.S.C. § 102(e) as anticipated by U.S. Patent No. 6,482,233 to Aebi et al. ("the Aebi patent");
- rejected claims 9, 19, 29 and 39 under 35 U.S.C. § 103(a) as unpatentable over the Aebi patent;
- rejected claims 5-7, 15-17, 25-27, 35-37 and 41-44 under 35 U.S.C. § 103(a) as unpatentable over the Aebi patent in view of U.S. Patent No. 5,989,289 to Coates et al. ("the Coates patent");
- rejected claims 12 and 32 under 35 U.S.C. § 103(a) as unpatentable over the Aebi patent in view of U.S. Patent Application Publication No. 2003/0014113 to Ralph et al. ("the Ralph application").

Rejections

35 U.S.C. § 102(e)

Claims 1, 3, 10, 11, 13, 20, 21, 23, 30, 31, 33, 40, 45 and 46 stand rejected under 35 U.S.C. § 102(e) as anticipated by the Aebi patent.

Independent claims 1 and 11 have been amended to recite:

"... a first plurality of teeth extending across the upper surface of the body, the first plurality of teeth all disposed in a first plane, the first plurality of teeth angling back toward the anterior end of the body to provide each of the teeth with an undercut; [and]
a second plurality of teeth extending across the lower surface of the

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body, the second plurality of teeth all disposed in a second plane, the second plurality of teeth angling back toward the anterior end of the body to provide each of the teeth with an undercut”

Independent claims 21 and 31 has been amended to add the following limitation:

“ . . . wherein the first and second plurality of ratcheting teeth are angled back toward the anterior end of the body to define a plurality of undercut surfaces.”

Independent claims 45 and 46 have been amended to add the following limitation:

“ . . . wherein the first and second plurality of teeth are angled back toward the anterior end of the body, thus creating an undercut surface associated with each of the teeth.”

Independent claims 1, 11, 21, 31, 45 and 46 are not anticipated by the Aebi patent because that reference fails to disclose every limitation of the claims, as required by 35 U.S.C. § 102(e). Specifically, the Aebi patent fails to disclose, either expressly or inherently, the “undercut” limitation of each of these claims. Rather, the Aebi patent shows pyramidal shaped teeth (spikes) 28, stating “[t]he anterior side of each spike is preferably slanted at an angle B which may preferably range from about 0° to about 30°. In a preferred embodiment, angle B is about 10 ° relative to the vertical. (See the Aebi patent, col. 4, lines 39-42 and Figs. 4, 6 and 7).

The claimed undercut - illustrated in Figures 4-6 and identified by the “hook angle” Θ s in Figures 5 and 6 of the instant application - is missing from the Aebi patent because the Aebi teeth are at most perpendicular to the axis of the spacer 10, (see the Aebi patent, col. 4, line 41), and thus the Aebi teeth can have no such undercut.

Thus, applicants request that the 35 U.S.C. § 102(e) rejection of claims 1, 11, 21, 31, 45 and 46 be withdrawn and that the claims be allowed. With respect to claims 3, 10, 13, 20, 23,

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30, 33 and 40, which depend from claims 1, 11, 21 and 31, and which recite additional features of the invention, applicants request that the 35 U.S.C. § 102(e) rejections of these claims be withdrawn, and that these claims be allowed, for the same reasons as stated for the independent claims.

35 U.S.C. § 103(a)

The Aebi Patent

Claims 9, 19, 29 and 39 stand rejected under 35 U.S.C. § 103(a) as unpatentable over the Aebi patent. Claims 9, 19, 29 and 39 depend from independent claims 1, 11, 21 and 31, and thus contain all of the limitations of their respective independent claims.

For the same reasons as stated above in regard to the non-anticipation of the independent claims by the Aebi patent, claims 9, 19, 29 and 39 are believed to be patentable over the Aebi patent. Specifically, the Aebi patent fails to disclose, teach or suggest the “undercut” limitation recited in each of the claims. Thus, applicants request that the 35 U.S.C. § 103(a) rejection of claims 9, 19, 29 and 39 be withdrawn, and that these claims be allowed.

The Aebi and Coates Patents

Claims 5-7, 15-17, 25-27, 35-37 and 41-44 stand rejected under 35 U.S.C. § 103(a) as unpatentable over the Aebi patent in view of the Coates patent. Claims 5-7, 15-17, 25-27, 35-37 and 41-44 depend from independent claims 1, 11, 21 and 31, and thus contain all of the limitations of the respective independent claims. For the same reasons as stated above in regard to the non-anticipation of the independent claims by the Aebi patent, claims 9, 19, 29 and 39 are believed to be patentable over the Aebi patent. Specifically, the Aebi patent fails to disclose, teach or suggest the “undercut” limitation recited in each of the claims.

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The Coates patent fails to remedy this deficiency, because, like the Aebi patent, it discloses teeth that are perpendicular to the axis of the spacer. Specifically, the Coates patent states "the first face 355 defines an angle $\alpha 1$ no more than about 90°. In other words, the first face 355 is preferably perpendicular to the engaging surface 337. (See the Coates patent, col. 3, lines 56-61; col. 10, lines 49-53; and Figs. 17-20). Thus, the Coates patent fails to disclose, teach or suggest the "undercut" limitation recited in each of the claims.

Applicants, therefore, request that the 35 U.S.C. § 103(a) rejections of claims 5-7, 15-17, 25-27, 35-37 and 41-44 be withdrawn, and that these claims be allowed.

The Aebi Patent and The Ralph Application

Claims 12 and 32 stand rejected under 35 U.S.C. § 103(a) as unpatentable over the Aebi patent in view of the Ralph application. Claims 12 and 32 depend from independent claims 11 and 31, respectively, and thus contain all of the limitations of the respective base claim.

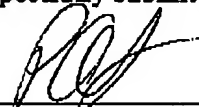
As stated above, the Aebi patent fails to disclose, teach or suggest all of the limitations of independent claims 11 and 31. Specifically, it fails to disclose the "undercut" limitation recited in both of those independent claims. The Ralph application fails to remedy this deficiency, because the Ralph application does not disclose teeth at all in relation to the top and bottom surfaces of its spacers.

Applicants, therefore, request that the 35 U.S.C. § 103(a) rejections of claims 12 and 32 be withdrawn, and that these claims be allowed.

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The Commissioner is hereby authorized to charge payment of any filing fees required under 37 CFR 1.16 and any patent application processing fees under 37 CFR 1.17, which are associated with this communication, or credit any overpayment to Deposit Account No. 50-2061.

Respectfully submitted,



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